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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
AVELLINO, JOSEPH E	
ART UNIT	**PAPER NUMBER**
2446	

MAIL DATE	DELIVERY MODE
12/03/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/704,535	BONEFAS ET AL.	
	Examiner	Art Unit	
	Joseph E. Avellino	2446	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 November 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *24-33,47 and 56-68* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *24-33,47 and 56-68* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/23/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 24-33, 47, and 55-68 are pending.

Information Disclosure Statement

2. The IDS dated September 23, 2008 has been considered. See enclosed PTO-1449.

Specification

3. The Office has considered the amendment to the title. The objection is withdrawn

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 24-29, 31, 47, 55-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda et al. (US 20020133573) (hereinafter Matsuda) in view of Olkin (USPN 6,310,892).

5. Referring to claim 24, Matsuda discloses a computer readable data storage medium storing software for supporting a plurality of intelligent messaging servers in an intelligent messaging network (i.e. a network 201), the software comprising:

a first code segment handling registration (automatic configuration, network addressing, service discovery) of NOA (networked office architecture) servers and clients with the intelligent messaging network, wherein registration comprises storing a server id (fully qualified domain name) and a server type (i.e. service definitions, as seen in ¶'s 86-95) for the first intelligent messaging server in a database storing server ids and server types for the plurality of intelligent messaging servers (e.g. abstract; p. 5, ¶ 47-49; p. 8-9, ¶ 83-114);

a second code segment for connecting NOA clients/servers to one another (e.g. abstract; p. 8, ¶ 83-95) (it is understood that if a NOA client can utilize the services of another NOA client, then it is inherent that they are connected to one another);

a third code segment encapsulating communication between NOA clients (e.g. abstract)

wherein a transport protocol used with said intelligent messaging network provides for: message segmentation and reassembly, message retries, message duplication detection, and message ACK and NACK service without relying on either a client application and server application (p. 3, ¶ 34, Matsuda discloses using the invention in a TCP/IP network, which, as shown by accompanying RFC 793 "Transmission Control Protocol", discloses the network has the ability to provide ACK and NACK service on page 20; message retries on page 4: section "Reliability"; message duplication detection on page 4: section "Reliability"; Message segmentation is disclosed as shown by accompanying RFC 791 "Internet Protocol", pages 35-36 discuss fragmentation of a datagram).

Matsuda does not explicitly disclose enabling communication between intelligent messaging servers, however Matsuda does disclose that if the NOA server does receive a DHCP Offer from a recently sent DHCP Discover broadcast, and the NOA sever determines that the other device is another NOA server, they determine which of them has the higher priority to determine which is the master (p. 5, ¶ 48). One of ordinary skill in the art would understand that this would be the easiest way for the servers to determine which server has the highest priority, and therefore it would have been obvious to do so to provide a simple method of determining which computer has the highest priority in the network.

Matsuda does not specifically disclose the transport protocol is a connectionless transport protocol used to allow said plurality of servers to communicate with one another and to provide networking services comprising message segmentation and reassembly, message duplication detection. In analogous art, Olkin discloses another method to transport packets over a network which utilizes a reliable connectionless transport protocol comprising a transport layer corresponding substantially to a transport layer of an OSI model (i.e. transport layer 240 and packetization 250 reside above the physical network layer 260 and below applications 230 and therefore inherently encompasses OSI transport layer) and provides network services including segmentation and reassembly (i.e. transport layer divides the data into predetermined length data packets…on the destination side extracts the data from the data packets to reconstruct the original data) (col. 1, line 59 to col. 2, line 22), and message duplication detection (i.e. prevent the receipt of duplicate segments) (col. 6, lines 11-26). It would

have been obvious to one of ordinary skill in the art to combine the teaching of Olkin with Matsuda in order to reduce network overhead inherent with TCP connection setup (i.e. three-way handshake) and therefore reduce network congestion on the network.

6. Referring to claim 25, Matsuda discloses the first code segment (i.e. registration process) specifies a server class (i.e. a server priority) and a server type (p. 6-7, ¶ 56, 61) for the first intelligent messaging server.

7. Referring to claim 26, Matsuda discloses the first code segment (i.e. registration process) specifies an IP address (p. 7, ¶ 65-66).

8. Referring to claim 27, Matsuda discloses the third code segment (i.e. network communication technique) generates a standard packet for communications between the intelligent messaging servers (i.e. an HTTP packet since the NOA architecture is based on an HTTP network connected to the Internet 201) (p. 3, ¶ 37; p. 4, ¶ 40).

9. Referring to claim 28, it is well known in the art that HTTP packets which the NOA architecture of Matsuda utilizes include a packet length (i.e. “Content-Length: XXXX”).

10. Referring to claim 29, it is well known in the art that HTTP packets which the NOA architecture of Matsuda utilizes includes a server ID (i.e. an IP address of the server) so that it is known the source or destination of the packet).

11. Referring to claim 31, Matsuda discloses a code segment encrypting and decrypting messages (p. 10, ¶ 126-127), however does not specifically state generating acknowledgement messages, processing the acknowledgement messages, and compressing and decompressing messages, however it is well known in the art that acknowledgement messages (known as ACK's) can be sent from destination to senders if a particular segment or message has not been received, and it is then inherent that both the destination computer and the sender computer can process the ACK message to determine what, if any, action must be done to rectify the situation (i.e. retransmit a segment, restart transmission, etc.). It is further common knowledge that code segments which compress and decompress messages is well known and expected in the art to save transmission processing and reduce overall bandwidth on the network communication link. Therefore it would have been obvious to one of ordinary skill in the art to provide for generating and processing ACK messages as well as compressing and decompressing messages to further reduce overall server processing and increase efficiency while reducing congestion over the network.

12. Referring to claim 50, Matsuda discloses searching the database based on server type to identify the second server, the second server being of a server type that the first server desires to connect with (p. 9, ¶ 97-105).

13. Referring to claim 51, Matsuda discloses facilitating a handshake procedure determining a validity of a connection between the first server and the second server (p. 9, ¶ 102-107).

14. Referring to claim 52, Matsuda discloses the server types are associated with functions performed by the plurality of servers (p. 8-9, ¶ 83-114).

15. Referring to claim 53, Matsuda discloses the server types comprise protocol gateway servers (i.e. fax servers), message router servers (i.e. doc_retrieval servers) and back-end servers (calendar_schedule and retrieval servers) (p. 8, ¶ 86-95).

16. Referring to claim 54, Matsuda discloses the server class is associated with a network access protocol for a network connecting a client to the first server (p. 6-7, ¶ 56, 61).

17. Referring to claim 55, Matsuda discloses the invention substantively as described in claim 1. Matsuda does not specifically disclose encapsulating a network access protocol used to transmit data from a client device to the first server such that the

network access protocol is transparent to the second server receiving the data from the first server. However it is well known that wireless browser-enabled cellular phones use the WAP (wireless application protocol) in order to connect to the Internet, this WAP signal is sent to a gateway which encapsulates this request into a standard HTTP GET request, thereby allowing the ability to connect to the internet. By this rationale it would have been obvious to one of ordinary skill to incorporate encapsulating a network access protocol used to transmit data from a client device to the first server such that the network access protocol is transparent to the second server receiving the data from the first server because it would allow cellular users the ability to utilize the system, thereby increasing customer base and providing more of a market share to the system.

18. Claims, 47, 56-68 are rejected for similar reasons as stated in the claims above.

Claims 30, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda in view of Olkin as applied above in view of Bell et al. (USPN 6,044,081) (hereinafter Bell).

19. Referring to claim 30, Matsuda in view of Olkin discloses the computer-readable data storage medium as stated in the claims above. Matsuda in view of Olkin furthermore discloses resending messages not ACK'd (col. 6, lines 50-60), detecting duplicate message segments, reassembly of message segments, and detecting duplicate messages (see rejections above). Matsuda-Olkin does not specifically and

explicitly disclose encapsulating a transport header, notifying a sender of a success or failure of a transmission, segmenting messages over a pre-determined length into message segments. Bell discloses:

encapsulating a transport header (MAC frame header) (col. 20, lines 24-33);

notifying a sender of a success or failure of a transmission (it would have been obvious to incorporate a failure notification mechanism to the sender when a frame check sequence error is detected to reduce bandwidth by halting transmission of unnecessary message segments and to retransmit pertinent segments) (col. 21, lines 20-30);

segmenting messages over a pre-determined length into message segments (encapsulation) (e.g. abstract; col. 20, lines 23-65);

assembling messages segments into messages (de-encapsulation) (col. 21, lines 30-51);

pacing a transmission of messages larger than a pre-determined number of segments (i.e. buffering messages and transmitting them in a queue) (col. 20, lines 20-25);

It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Bell with Matsuda-Olkin to provide an efficient bandwidth connection while providing a path from every node to every other node within a private network without requiring multiple physical connections for each node as supported by Bell (col. 8, lines 30-35).

20. Referring to claim 32, Matsuda-Olkin discloses the computer-readable data storage medium as stated in the claims above. Matsuda-Olkin does not disclose encapsulating a communication layer. Bell discloses encapsulating a communication layer (the Office takes the term communication layer to mean formatting a higher level message to be transmitted over a network) (col. 20, lines 23-65). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Bell with Matsuda-Olkin to provide an efficient bandwidth connection while providing a path from every node to every other node within a private network without requiring multiple physical connections for each node as supported by Bell (col. 8, lines 30-35).

21. Referring to claim 33, it is well known in the art that application specific messages can be processed by servers (i.e. serving a web page, a CGI script, SOAP execution module, etc.) to provide services required by the application to the client. Furthermore, it is well known in the art that specific servers may compress messages as a form of encryption in order to provide an enhanced level of security as well as reducing used bandwidth on a communication link. Matsuda discloses code providing special security services (i.e. passwords and database updating) (p. 10, ¶126-128).

Response to Amendment

22. Applicant's arguments dated November 5, 2008 have been considered but are not persuasive.

23. Applicant argues, in substance, that the Examiner has utilized inherency improperly in stating that the NOA clients of Matsuda are connected to one another, and that Olkin inherently encompasses an OSI transport layer. The Examiner disagrees. Applicant has not provided any rationale as to why the Examiner's assertion is improper. One of ordinary skill in the art would clearly understand that if a device is able to utilize the services of another device, it must be able to communicate with the other device (i.e. a client computer utilizing the services of a remote printer must inherently be able to communicate with the printer). This clearly demonstrates that its inherent that the devices must be connected to one another in some fashion in order to utilize the services as described in the rejection above. With respect to Olkin, an OSI transport layer is designed to "provide transparent transport of data between end users". As such, the transport layer of Olkin clearly fits this interpretation. By this rationale, it is inherent that the transport layer of Olkin fits within the definition of an OSI transport layer. By this rationale, there are no improper inherency issues in the rejection and therefore the rejection is maintained.

24. Applicant argues, in substance, that it is the destination node device which detects the receipt of duplicate segments, not the connectionless protocol, since the local state information is initialized by the destination node. The Examiner disagrees. Applicant has completely misinterpreted the invention of Olkin. Applicant must understand that the invention of Olkin is the transport layer itself, and whatever is being

conducted is described with respect to the transport layer. Applicant's attention is directed to the abstract, which states that "a transport layer on the destination node creates local state upon receipt of the first segment". Even if Applicant was correct, the state information used by the destination node was created by the transport layer. This state information is used by the transport layer to detect duplicate segments as shown above. This clearly demonstrates that the transport layer detects the duplicate segments on the destination device. By this rationale, the rejection is maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (571) 272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey C. Pwu can be reached on (571)272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph E. Avellino/
Primary Examiner, Art Unit 2446